## CLAIMS

[Claim 1] A conveying and sorting apparatus including a plurality of tilting conveyor units arranged in a row in a conveying direction, each of the tilting conveyor units configured to be switchable in orientation about a support shaft parallel to a conveying direction of a conveyed object between an horizontal conveying orientation and a tilted orientation for discharging the conveyed object laterally with respect to the conveying direction of the conveyed object by gravity, and also including a conveying conveyor for the conveyed object,

the conveying conveyor is composed of a belt conveyor having a belt stretched between a pair of front and rear pulleys and the belt of the belt conveyor has an inside surface provided with a plurality of ridge portions along a belt longitudinal direction at appropriate intervals in a belt width direction and has an outside surface provided with ridge portions along the belt width direction at regular intervals in the belt longitudinal direction, and the pair of front and rear pulleys are not provided with flange portions sandwiching both sides of the belt and are provided, on circumferential surfaces, with a plurality of recessed grooves into which the ridge portions on the belt inside surface are individually fitted,

the ridge portions on the belt inside surface have a trapezoidal cross sectional shape having a width becoming narrower toward a distal end side, and the recessed grooves on the pulley circumferential surfaces have a shape with both inclined side surfaces abutting both inclined side surfaces of the ridge portions on the belt inside surface, wherein,

the ridge portions are provided at both ends of the belt width direction and in an intermediate region between the both ends, and the recessed grooves are provided at both ends of the pulleys width direction and in an intermediate region between

the both ends so that all the ridge portions can be fitted,

in a state where the ridge portions are fitted into and abut the recessed grooves, the ridge portions and the recessed grooves are formed so that the distal ends of the ridge portions and bottom portions of the recessed grooves do not hit against each other and formed so that valley bottom portions between the ridge portions and crest portions between the recessed grooves do not hit against each other, and

only the respective both inclined side surfaces of the ridge portions and the recessed grooves abut each other between the pulleys and the belt.